

REMARKS

In response to the Official Action of June 9, 2004, claims 1 and 20 have been amended and claim 24 is newly presented. Referring now to paragraphs 1, 2 and 3 of the Official Action, claim 20 is now dependent from claim 19 and therefore there is sufficient antecedent basis for the phrase "said first coding".

Referring now to paragraphs 4 and 5 of the Official Action, it is respectfully submitted that claims 1-6 and 9-14 are neither anticipated nor suggested by US patent 6,073,021, Kumar et al. (hereinafter Kumar) for the reasons set forth below.

Claim 1 has been amended to make clear that the second communication is only transmitted from another of the plurality of first stations which therefore makes clear that it is not being transmitted from a one first station associated with the recited plurality of first stations. With this amendment, it is submitted that any ambiguity with respect to claim 1 has been removed and that claim 1 is distinguished over Kumar.

Kumar is directed to a method for performing soft handoffs wherein as stated in Kumar at column 1, lines 15-17 "A soft handoff is a state in which a mobile-telephone maintains simultaneous radio links with multiple based stations". In Kumar, the soft handoff uses pilot and traffic signals that are transmitted from a plurality of "active" based stations in communication with a mobile station. Each base station uses the same modulation scheme, as well as the same Walsh functions (which determine the channel), the same pair of pseudo-noise sequences, but which use different phase offsets in order to distinguish a signal from one base station from that of another base station. As a result, the same information is communicated from each base station to the mobile station but with different phase offsets of the spreading sequence. As such, the mobile station is in soft handoff with all of the information transmitted from each active base station. This is made clear in Kumar at column 3, lines 44-64.

In contradistinction thereto, the present invention as claimed in amended claim 1, sets forth that the mobile station is in handoff with respect to only a first communication transmitted from two stations of the plurality of first stations, but not with respect to a second communication which

is only transmitted from one (the “another first station”) of the plurality of first stations. Thus, the second communication is only transmitted from a single first station. The present amendment of claim 1 makes this clear even though it is respectfully submitted that it is implicit in claim 1 as originally submitted. The amendment to claim 1 removes any potential ambiguity by reciting that the second communication is only transmitted from another station of said plurality of first stations.

Since in Kumar the mobile station is in soft handoff with all of the information transmitted from each active base station, there is no teaching or suggestion of transmitting a first communication from one station of the plurality of first stations and transmitting the same first communication and a second communication from another station of the plurality of first stations. Thus, the problem addressed in the present invention is to provide a method of combining different information at a mobile station transmitted from a plurality of first stations where the information transmitted from a one first station comprises a first communication, such as a speech connection, and the information transmitted from a second first station comprises both that first communication and a second communication such as a data connection. By further providing first and second associated information in the transmission from the two distinct first stations respectively, allows for the information to be combined in the mobile (second) station without the information being of a contradictory nature. Since Kumar does not even discuss the possibility of transmitting different information to be combined at the mobile (second) station, the present invention addresses a different problem than that addressed in Kumar and therefore the present invention provides a clear advantage over Kumar. It is therefore respectfully submitted that claims 1-6 and 9-14 are neither disclosed nor suggested by Kumar.

Referring now to paragraph 6 of the Official Action, it is also respectfully submitted that claims 17-19 and 23 are neither anticipated nor suggested by US patent 6,144,861, Sundelin et al (hereinafter Sundelin). Sundelin is directed to downlink power control in a cellular mobile radio communications system. Sundelin describes a method for controlling the downlink transmit power of a base station to a mobile station during soft handoff. The transmit power of the base station is controlled by using a transmit power control command (TPC) included in the uplink transmission sent from the mobile station together with a signal-to-interference ratio (SIR), calculated at the base

station, of the signal from the mobile station received at the base station. The SIR of the signal from the mobile station is used to reduce the transmit power of the base station with the higher path loss to the mobile station during soft handoff which is indicated by a lower value SIR. In this way, as disclosed in Sundelin, the base station that is less dominant does not transmit at high power levels to the mobile station during a handover such as described at column 2, lines 48-67. Such a method does not in any way suggest a network wherein in a first mode "the first stations transmit identical control information to said second station and in a second mode...the control information transmitted by said first stations to said second station is different."

In Sundelin, control of the uplink transmit power is described in accordance with commands from the base station (see columns 6, lines 28-32). However, Sundelin does not describe uplink power control in any further detail. Sundelin only describes downlink power control in detail, where control information is transmitted by the mobile station (second station) to the base station (first station). In any event, there is no disclosure in Sundelin of transmitting different control information in different modes even when controlling the downlink transmit power, since the power control procedures in Sundelin apply equally when one or more base stations or sectors are involved (see column 8, lines 4-7). Furthermore, the TPC transmitted from the mobile station to each base station is the same since the TPC is calculated from the SIR measurement of the diversity combined signal (see column 6, lines 42-47). Accordingly, the control information transmitted is the same. Therefore, it is seen that transmitting different control information in a second mode as recited in claim 17 allows for both data and speech information to be combined at the mobile station, even when this information transmitted from each base station is different. This problem is neither mentioned nor suggested in Sundelin. It is therefore respectfully submitted that claim 17 which specifically requires that first stations transmit identical control information to said second station in a first mode and send different control information to said second station in a second mode, is neither anticipated nor suggested by Sundelin. Therefore, reconsideration of claim 17 and the rejected dependent claims thereto (claims 18-19) is respectfully submitted.

Referring now to the Examiner's rejection of claim 23 as anticipated in view of Sundelin, it is respectfully submitted that there is no disclosure or suggestion in Sundelin that a method of

transmitting signals from a plurality of first stations to the same second station includes transmitting first signals including first associated information from one of the plurality of first stations to the second station and also transmitting second signals including second associated information differing at least partially from the first associated information from another of the plurality of first stations to the second station, wherein the second signals at least partially differ from the first signals. Instead, Sundelin relates to what might be called softer handoff between one base station and another where the same information is transmitted from plural sources such as base stations or sectors and combined at the mobile station. In view of the foregoing, it is respectfully submitted that claim 23 is neither disclosed nor suggested by Sundelin.

Referring now to paragraph 7 and 8 of the Official Action, it is respectfully submitted that claims 7 and 8 are not suggested by Kumar further in view of US patent 5,711,004, Blasiak et al., because these claims depend from amended claim 1 and, as set forth above, amended claim 1 is believed to be distinguished over the cited art. Similarly, with reference to paragraph 9 of the Official Action, it is respectfully submitted that claims 15 and 16 are not suggested by Kumar further in view of US patent 6,374,112, Widegren et al., due to the dependency of these claims ultimately from amended claim 1.

Referring now to paragraph 10 of the Official Action, claims 20-22 as amended are believed to be distinguished over Sundelin in view of US patent 6,456,860, Nakagaki, due to the fact that these claims depend from claim 17 which, as set forth above, is believed to be distinguished over Sundelin.

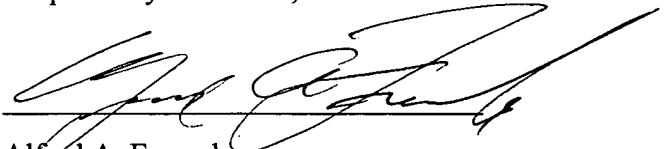
Newly submitted claim 24 is similar to independent claim 17 but is directed to a mobile terminal rather than a network comprising a plurality of first stations and a plurality of second stations. For the reasons presented above with regard to claim 17, it is respectfully submitted that newly submitted claim 24 is distinguished over the cited art.

Finally, filed herewith is a Supplemental Information Disclosure Statement containing references cited in a European Search Report having a search completion date of September 22, 2004 with regard to a corresponding European application. For reasons the same as those set forth above with regard to Kumar, it is respectfully submitted that EP 0577 322 cited therein does not disclose or suggest the present invention as claimed. The remaining references cited in the IDS are

technological background references and do not disclose or suggest the present invention as claimed.

In view of the foregoing, it is respectfully submitted that the present application as amended is in condition for allowance and such action is earnestly solicited.

Respectfully submitted,

  
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